members to choose either retail or mail pharmacy as their preferred distribution channel. **METHODS:** Claims (n = 168,381) submitted between Apri, 1, 2008 and December 31, 2008 for an employer after it began offering the same price on 90-day retail and mail maintenance prescriptions were used to calculate Medication Possession Ratio (MPR), Generic Dispensing Rate (GDR), Generic Substitution Rate (GSR), and Preferred Brand Dispensing (PBDR) for patients impacted by the benefit. GDR, GSR, and PBDR were calculated for all claims with a 90-day supply. MPR was calculated for all patients who were eligible 180 days before and after their first 90-day prescription between April 1 and June 30, 2008 for each maintenance class, using that first prescription and any within the subsequent 180 days. Overall metrics and those for select classes with sufficient sample size are presented. **RESULTS:** The average MPR, across all classes, was 80% for retail dispensed prescriptions and 78% for mail. Among six high-volume classes, the average MPR was 82% at retail and 81% at mail, with MPRs for individual classes ranging from 75% (PPIs) to 89% (ACEs and Anticonvulsants) for retail-dispensed and 74% (SSRIs) to 85% (ACEs) for mail-dispensed. When comparing retail and mail dispensed prescriptions, GDR (57% vs. 56%), GSR (99% vs. 99%), and PBDR (86% vs. 86%) were nearly identical. **CONCLUSIONS:** When out-of-pocket costs and days supply per prescription are identical, adherence rates and related formulary performance metrics for mail and retail-dispensed maintenance medications appear essentially similar in early results. These pilot results will need to be confirmed as more payers adopt this benefit design and longer follow-up periods improve adherence measurement precision.

PIH28

THE IMPACT OF MEDICARE SUPPLEMENT INSURANCE ON ACCESS, UTILIZATION, AND COST OF HEALTH CARE AND ON COMPLIANCE WITH RECOMMENDED PHARMACEUTICAL TREATMENT

Marshall JK[1], Ozminkowski RJ[2], Anderson M[3], Hawkins K[4]
[1]Ingenix, MINNEAPOLIS, MN, USA, [2]UnitedHealth Group Alliances, Ann Arbor, MI, USA, [3]UnitedHealth Group Alliances, MINNETONKA, MN, USA, [4]Ingenix, Brooklyn, MI, USA

OBJECTIVES: The literature was reviewed to determine the impact of Medicare supplement insurance (i.e. Medigap) on the Medicare program with respect to access, utilization, outcomes, costs, and drug compliance. Additionally, we discuss a new program to improve pharmaceutical utilization for Medigap enrollees. **METHODS:** We conducted a literature search using PubMed, looking for peer-reviewed articles that compared access, utilization, outcomes and costs between enrollees with Medicare fee-for-service coverage alone to those with Medigap. Additional searches focused on differences in pharmacological compliance, for those with and without drug coverage, among the two groups. Finally, we searched for pharmacy compliance programs offered through supplement insurance plans. **RESULTS:** Twenty-seven articles met our search criteria. The literature suggests Medicare Supplement Insurance can be cost-effective, that it is correlated with better access to health care services, and may result in higher utilization of preventive services than would be the case without such coverage. Also, the type of supplement insurance did not significantly influence prescription drugs utilization among Medicare enrollees. No articles found discussed any current efforts to manage the pharmaceutical treatment of Medicare Supplement Insurance enrollees. **CONCLUSIONS:** Medigap programs have not historically managed their enrollees like Medicare Advantage plans have done. In particular, the literature suggests there is much room for improvement in pharmacy management for all Medicare populations, including those enrolled in Medigap plans. This has led AARP and UnitedHealth Group to offer a pharmacological compliance program, with disease management and case management programs, for their AARP Medicare Supplement Insurance enrollees, beginning in 2009. Results from this care management effort will help tailor models for more ways to better manage the care for fee-for-service Medicare enrollees with supplement coverage.

PIH29

COMPARISON OF ADHERENCE, PERSISTENCE AND MEDICATION WASTAGE IN 30-DAY VERSUS 90-DAY REFILL CHANNELS

Vats V[1], Ziang J[2], Lee KY[3], Schumock GT[1], Khandelwal NG[3]
[1]University of Illinois at Chicago, Chicago, IL, USA, [2]Walgreens Health Initiatives, Deerfield, IL, USA, [3]Walgreens Health Services, Deerfield, IL, USA

OBJECTIVES: To compare medication possession ratio (MPR), medication persistence & pill wastage in 90-day versus 30-day refill channel among 5 different drug classes. **METHODS:** We conducted a retrospective study using pharmacy claim database. The cohorts were classified based on the type of refill duration (30-day or 90-day). Patients included in the study were continuously eligible in the insurance plan for the study duration and were new to therapy during the identification period (January 1, 2006 to June 30, 2006) and were followed for 21 months after their index date. Claims in the first 3-months after the index date were excluded from the analysis to avoid immortality bias. Outcomes included MPR, persistence to therapy, and pill wastage. Pill wastage was calculated only among those who switched therapy within a pharmacological class of drugs (i.e. diuretics). Therapeutic drug classes included in the study were antihypertensives (AH), anti-depressants (AD), antihyperlipidemics (AL), anti-asthmatics (AA) and anti-diabetics (AD). **RESULTS:** A total of 8403, 6296, 7197, 5383 and 2722 subjects in AH, AD, AL, AA and AD drug classes were included. MPR and persistency were consistently and statistically higher in the 90-day versus the 30-day group at 9-months and 18-months post index among all the 5 drug classes studied. There was a consistent trend of decrease in MPR and persistency at 18-months in comparison to 9-months follow up in all the 5 therapeutic drug classes studied. The higher trend in pill wastage in the 90-day versus 30-day refill channel was not consistent across all therapeutic categories. **CONCLUSIONS:** Members who refilled 90-day versus 30-day were associated with a significant higher MPRs and persistency. Efforts to increase medication adherence should be continued steadily along the course of therapy as a medication adherence with chronic medications continues to decrease over time.

PIH30

PATTERNS OF UTILIZATION AND DISCONTINUATION OF MEDICATION IN A RETIREE POPULATION

Visaria J
Ohio State University, Columbus, OH, USA

OBJECTIVES: To describe the patterns of medication discontinuation in a retiree population. Premature discontinuation of medications adversely affects patients' outcomes and may require use of additional health care resources. **METHODS:** The study included pharmacy claims from a retirement system for the period January 2000-September 2005. The unit of analysis was the course of drug therapy (CDT), representing a unique combination of a patient and a drug product (i.e. generic name, formulation and strength). CDTs initiated between August 1, 2000 and July 31, 2001 and discontinued before March 1, 2005 were included in the analysis. Days in therapy for each CDT were calculated as the difference between the date of the first and last prescription of the CDT. **RESULTS:** The study included 1.1 million CDTs representing 5.9 million claims. 37.0% of CDTs were discontinued with less than a month in therapy, 50.0% with less than 6 months, and 76.0% within one year. Maintenance therapy comprised 740,788 CDTs (70.30%) of which 27.0% had a single claim. Maintenance therapies had the following cumulative utilization patterns: 36.7% CDTs discontinued in less than 3 months of therapy, 45.0% in less than 6 months, 74.7% within one year, and 87.2% within two years. 21.6% of non-maintenance CDTs were continued for more than a year and 11.8% for more than 2 years. **CONCLUSIONS:** Premature discontinuation of therapy intended for long-term use is highly prevalent with more than one-fourth of all maintenance therapies discontinued at the first prescription, and nearly three-fourths discontinued within the fist year of therapy. In the other hand, over one-fifth of non-maintenance therapies were used for over a year. The assessment of compliance using claims data should account for discontinuation of therapy prior to the potential manifestation of positive patient outcomes and for the short-term usage of maintenance therapies and prolonged use of non-maintenance therapies.

PIH31

ASSESSING THE VALUE OF LESS FREQUENT MEDICATION DOSING ON ADHERENCE AND OUTCOMES

Veenstra DL[1], Alfonso R[1], Best JH[2], Bruhn D[3], Garrison LP[1]
[1]University of Washington, Seattle, WA, USA, [2]Amylin Pharmaceuticals, Inc., San Diego, CA, USA, [3]Eli Lilly and Company, Indianapolis, IN, USA

OBJECTIVES: To systematically evaluate studies assessing the outcomes and economic value of decreased medication dosing frequency. **METHODS:** We searched the literature from 1998 to 2008 using the MEDLINE database for articles that evaluated the cost-effectiveness of dosing frequency changes and adherence. Only non-English articles were initially excluded; from the identified citations, all abstracts were reviewed; those lacking a clear link between dosing frequency changes, adherence, and costs or cost-effectiveness analysis (CEA) were excluded. The selected articles were thoroughly reviewed and summarized. **RESULTS:** A total of 168 citations were identified: after exclusions by reviewing the abstracts, 21 were selected and reviewed–18 original studies and three systematic reviews. The articles encompassed several chronic pathologies, e.g., osteoporosis (seven) and hepatitis C (two). Seven of the ten economic studies utilized decision modeling frameworks (usually one-year horizon), where the effect of dosing frequency changes on adherence was not the primary outcome. In most cases, assumptions on adherence changes were used as part of the sensitivity analysis, but lacked support from strong evidence. Only two randomized clinical trials where adherence was not the primary outcome reported the effect of dosing changes, but focused, as did cross-sectional surveys, on patient preferences instead of cost-effectiveness. Observational studies and retrospective claims database reviews used different measures, definitions, and methodologies, making it difficult to summarize their results. Overall, the studies suggested that less frequent dosing leads to improved outcomes, although direct evidence of economic benefit was often lacking. **CONCLUSIONS:** Due to the lack of direct evidence, head-to-head direct comparisons of dosing regimens and long-term prospective studies are ideally needed to evaluate the cost-effectiveness of less frequent dosing that may improve outcomes through improved adherence or improved pharmacokinetic/pharmacodynamic effects.

PIH32

THE BRAZILIAN PORTUGUESE VALIDATION OF THE PROLAPSE – QUALITY OF LIFE QUESTIONNAIRE – P-QOL

Scarlato A[1], Fonseca ESM[2], Fonseca MCM[2], Muranaka AH[3], Sartori MGF[2], Girão MJBC[2], Castro RA[2]
[1]Federal University of São Paulo, São Paulo, Brazil, [2]UNIFESP – Federal University of Sao Paulo, Sao Paulo, Sao Paulo, Brazil, [3]Universidade Federal de São Paulo, Sao Paulo, SP, Brazil

OBJECTIVES: The aim of this study was to translate and validate a Brazilian version of the "Prolapse – Quality Of Life Questionnaire" (P-QOL) as a specific instrument to assess the severity of symptoms and their impact in the quality of life of Brazilian women with genital prolapse. **METHODS:** Sixty-five patients (45 with symptomatic and 20 with asymptomatic pelvic organ prolapse), were enrolled from the outpatient clinic of the Uroginecology and Vaginal Surgery Section of the Gynecology Department of the Federal University of São Paulo (UNIFESP). At first, we translated the P-QOL